

## U.S. Forest Service study will examine wildfire effects on watersheds

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U.S. Forest Service (USFS) scientists are beginning a three-year study to examine how wildfires affect water supplies. Water shortages are a major concern in the arid regions of the western U.S., and the risk of large wildfires increases as global temperatures rise. This study will help identify which watersheds are at highest risk and explore how problems could be mitigated. Wildfires can affect both water quality and quantity downstream. For example, a large, high-intensity fire can burn most trees in a watershed, so that very little rainfall is retained by the bare soil. As a result, large volumes of water flow into drainages, leading to erosion, landslides, flash floods, and an influx of ash and sediment into the water supply. Conversely, overgrowth of vegetation due to lack of fire in an ecosystem can pull water from the soil and decrease runoff.

USFS scientists will investigate mitigation strategies like forest thinning and prescribed burns on a larger scale than previous work. The study results will have implications for more than 180 million people that rely on watersheds under USFS management.

Sources: E&E News, U.S. Forest Service

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